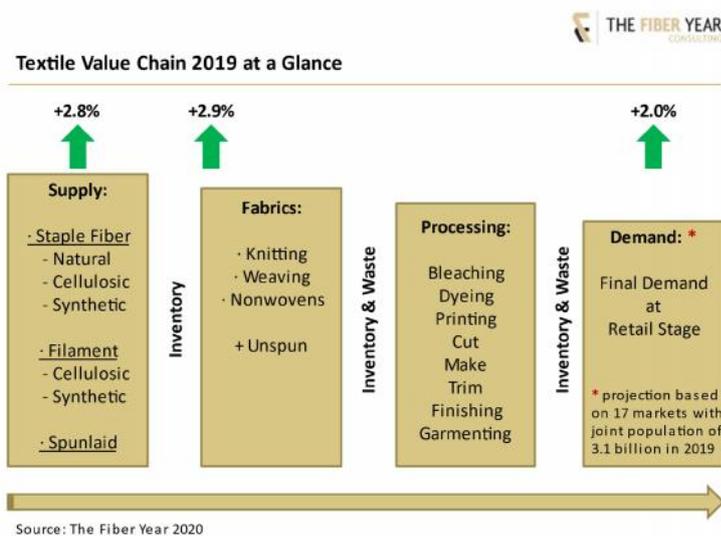


## The New Normal after COVID-19 and Outlook on Sustainable Fibers - Summary

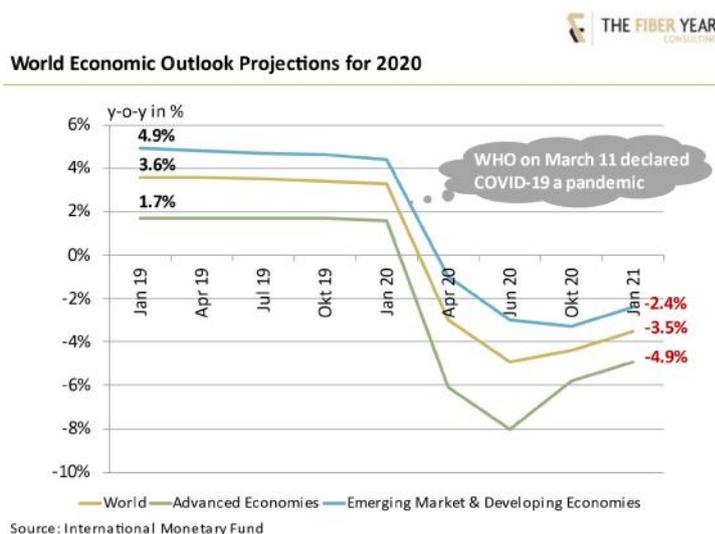
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The report “The Fiber Year 2020” newly included key growth figures along the textile value chain to illustrate different dynamics from supply to demand at retail stage as global fiber supply seemingly decoupled from economic growth rates recently.

Upstream activity in global fiber supply and processing volume was pretty much balanced in 2019, although already below the long-term growth while consumption at final retail stage further slowed.

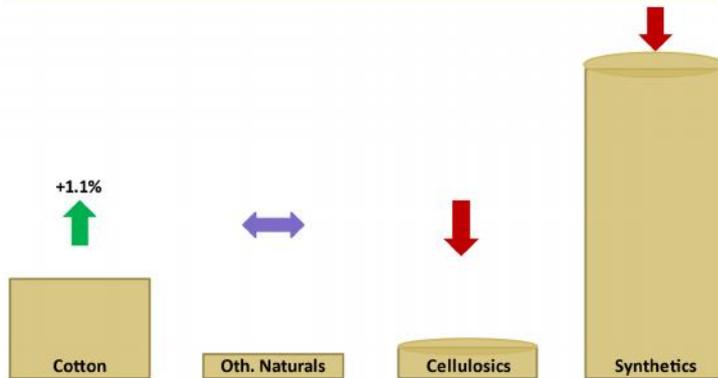


Economic parameters for 2020 gradually worsened through the prior year before sharply downwardly revised projections after World Health Organization declared COVID-19 a pandemic in early March.

Latest IMF estimates from January suggest the world GDP to decline by 3.5% - an outlook not as grim as in the months before as recent vaccine approvals gave reason to overcome the pandemic.

What does it mean for supply and demand?

Supply Estimates 2020



Source: ICAC, January 2021 estimate for 2019/20 cotton season

It's currently too early for a final world picture but trends are identifiable.

According to January projections from ICAC, cotton supply in 2019/20 season rose by about 1% while demand collapsed.

Thus, inventory level at the third-highest size in history may put pressure on cotton prices, even if January prices are robust and at a level we have not seen in the year before.

The market comprising all other natural fibers was tolerably stable despite modest reductions in wool and jute supply but on-going gains in flax production are expected.

Both manmade fiber segments are projected to suffer from declines with manmade cellulosic fibers after eleven years of continuous growth even dropping at faster pace. That's quite an unusual movement but I am quite confident with the accuracy of this change. The industry preferred standard blends like cotton/polyester at lower prices as consumers cut spendings for necessary pieces of garment given job insecurity and losses in disposable income. This notion is further being supported by early indications that the polyester staple fiber market is supposed to be the only mainstream segment facing positive growth last year after regaining market shares.

Volume of Retail Trade –Textiles & Clothing 2019/20



Source: Eurostat, U.S. Census Bureau \* Including footwear

The recent development of textiles and clothing retail trade for the European Union and the U.S. reveals slow movement in 2019 before the steep contraction between March and June, unprecedented in negative vehemence, which was result of lockdown measures, store closures and Stay-at-Home orders.

Demand was depressed and led to a strong increase of unsold apparel, which will delay the industry's recovery.

We will skip general conditions in place that hamper or at least delay recovery and refer to crucial points for the fiber business with far-reaching impact.

After the sudden collapse of last year's spring and summer collection most retailers' priority is to overcome excess apparel inventory challenges. Putting unsold clothes back into stores this year goes along with lower order volumes than normal for new pieces of garment, which calls for decoupled growth rates of global economy and apparel manufacturing.

Another worrying movement is the price surge across all fibers beginning of the year.

The actual cotton price level was last seen end of 2018 despite current season's ending stocks projected to rise to the third-largest volume in history. Wool - and I am referring to fine qualities below 22 micron - are surging by almost 50% from a year-low early September. Soaring manmade fiber prices are result of a number of facts:

1. crude oil on the upswing since September,
2. supply issues - force majeure declarations due to technical issues and the record-breaking U.S. Atlantic hurricane season with U.S. refinery run rates the lowest since time series began in 1991,
3. skyrocketing freight costs out of Asia,
4. regular cracker maintenance postponements due to COVID-19.

In a nutshell, the not necessarily demand-driven price surge meets consumers that are even more price-sensitive these days, which will make it more difficult to sell high-quality and sustainable garment.

#### What to expect after Covid19?

- Supply:**
- No de-globalization
  - Changes in future sourcing seems possible for essentials of life
  - Shareholder value and quarterly earnings reporting will prevent garment capacity moving to higher-cost domestic markets
- Demand:**
- „New normal“ will be on a lower level we all got used to before
  - Demand shortfall in the next years
  - Outsized demand for hygiene and medical articles (PPE)... for how long?

It would be helpful to have a crystal ball to predict what's coming next. What we have seen so far is that the simultaneous crisis of supply and demand poses a life-threatening burden for the entire world and economic activity is not expected to normalize on short notice despite policy support.

However, some key parameters become apparent by now.

Concerning supply, revival of local manufacturing in our industry is unlikely. The impact on globalization, however, remains to be seen as countries realized the importance of being able to supply themselves.

Changes in future sourcing may well occur for essentials of life like, for example, pharmaceuticals but apparel is neither strategic nor essential but just a fashionable item with ongoing pressure on prices. Relocation of processing chains from low-cost countries seems implausible and to safeguard against future supply-chain shocks is not a strong argument to re-shore garment capacity to higher-cost domestic markets in the age of shareholder value and quarterly earnings reporting.

No matter whether it will be late this year or in 2022, the world will not return to what life was like before but rather adjust to a „new normal”, which will be on a lower level we all got used to before. Demand will remain depressed, in particular, in the apparel business that consumes more than 55% of world fibers.

Companies have invested in remote work tools, identifying all of a sudden a new potential for cost savings, and without having workplaces or recreational spots to go why should people buy new outfits? Wearing a white shirt during a Zoom conference and afterwards going back into the closet until the next virtual meeting will not prompt consumers to refresh their wardrobe from season to season.

The segment of carpets and home textiles has experienced positive signs as mass work-from-home policies have inspired people to refurbish their home, instead of spending money for travels and vacation making their home more comfortable and cozier as they had never spent so much time at home. However, growing private residential expenditures for a certain period of time cannot compensate for missing nonresidential investments. Less business traveling, ongoing travel restrictions and lockdown measures also contribute to reduced demand from hotels and restaurants.

Ongoing store closures in favor of online sales and continuous working from home with more office space remaining vacant will not only significantly change townscape but may result in a possible housing crisis.

Technical textiles have been struggling already before COVID-19 outbreak as global vehicle production began to decline in 2018 and, for instance, European new passenger car sales last year fell by a quarter, short of 3.8 million vehicles. It seems, that the car industry firstly needs to overcome a structural crisis that got worse with Covid-related falling disposable incomes, millions of job losses, supply chain disruptions and consumers' increasing wait-and-see attitude on emissions-free mobility.

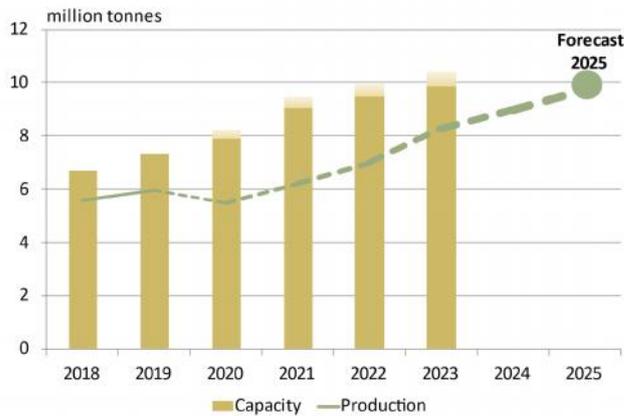
Another mobility segment suffering from international travel restrictions is the aviation industry with previous years' aircraft deliveries plummeting by 34% at Airbus and even 59% at Boeing.

What we have been seeing since corona outbreak and will do so for the time being is outsized demand for hygiene and medical articles, in general personal protective equipment, with capacities around the globe strongly being expanded. However, I do hope we will return to life in which wearing a face mask is not mandatory and necessary anymore, which leaves to the question what will be future applications to keep those machinery operating?

The U.S. reentering the Paris Climate Agreement will give stimulus and more attention toward environmental issues and greater support for decarbonization, shift to renewables and efforts for circular economy. A positive impact on sustainability in fashion and retail industries is to be expected.

Rebuilding relationships with trade partners and the coordinated use of trade and tariff policy and investments may also promote decarbonization in major supplying countries as 7 of the top-10 U.S. textile and apparel suppliers are located in Asia.

**Viscose Staple Fiber Capacity Outlook**



Despite last year’s decrease of viscose fiber production, I continue to be confident that the market size may reach a level of around 10 million tonnes by 2025, corresponding to an addition of about 50% in just 5 years – quite a stunning growth we already got used to or even have taken dynamics for granted following fast lane movement since 2002, which was just interrupted by extraordinary incidents like financial crisis and coronavirus.

Admittedly, capacity additions may see some postponements due to currently lower utilization rates but in the long run expanded supply will come to the market.

PLA fibers made from biopolymers witnessed last year’s demand exceeding supply - to put into perspective on much lower level than manmade cellulose - and positive growth will continue as noticeable from latest announcements proving substantial capacity expansions in the pipeline.

BBCA/FUTERRO started China’s first fully integrated sugar-to-PLA plant in Bengbu, Anhui province, with 30,000 tonnes capacity late last year and plan an expansion to 100,000 tonnes. NatureWorks’ facility in Blair, Nebraska, will raise supply by 10% from end of this year. Total Corbion PLA plans - and that is awesome from European perspective - the first world-scale PLA plant in Europe with 100,000 tonnes annual capacity scheduled to commence operations 2024 in France.

**Summary**

- Textile industry remains growth model even if recovery may lag behind economic growth
- „New normal” after overcoming pandemic will be on lower level for the time being
- New stimulus for sustainability with positive impact on fashion and retail industries
- Growing awareness for need of sustainable clothing stimulates viscose/PLA fiber growth and investments in recycling
- Speed of capacity buildup may be affected by COVID-19

We must not forget that textile industry remains a growth model even if recovery may lag behind economic growth for a limited period.

The „New normal” after overcoming pandemic will be on a lower level for the time being and apparel demand will certainly be influenced by the share of home office workplaces in future, consumer sentiment, household income and security of jobs.

Ultimately, apparel business is extremely cost driven and bargain hunting seems to become national sport, hence, higher priced apparel from sustainable fibers may flourish not until business and consumer sentiment have significantly improved and pandemic has overcome.